

REMARKS

The present Amendment amends claims 1, 4, and 6-8 and 12, cancels claims 3 and 5 and leaves claims 2, 9-11 and 13 unchanged. Therefore, the present application has pending claims 1, 2, 4 and 6-13.

Claim 3 stands objected to due to informalities noted by the Examiner in paragraph 2 of the Office Action. As indicated above, claim 3 was canceled. Therefore, this rejection is rendered moot.

Claims 1-13 stand rejected under 35 USC §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regards as their invention. As indicated above, claims 3 and 5 were canceled. Therefore, this rejection with respect to claims 3 and 5 is rendered moot. Various amendments were made throughout the remaining claims to bring them into conformity with the requirements of 35 USC §112, second paragraph. Therefore, Applicants submit that this rejection is overcome and should be withdrawn.

Specifically, amendments were made throughout claims 1, 2, 4 and 6-13 to correct the informalities noted by the Examiner in paragraph 4 of the Office Action.

The Examiner's cooperation is respectfully requested to contact Applicants' Attorney by telephone should any further indefinite matter be discovered so that appropriate amendments may be made.

Claim 1 stands rejected under 35 USC §102(b) as being anticipated by Walsh (U.S. Patent No. 5,430,855); and claims 2-4, 8-10 and 13 stand rejected under 35 USC §103(a) as being unpatentable over Walsh, Pignolet (U.S. Patent No. 5,898,828) and Yoshida (EP No. 1104113 A3) or

alternatively over Walsh, Pignolet and Hogeboom (EP 0866559). As indicated above, claims 3 and 5 were canceled. Therefore, the 35 USC §103(a) rejection of claims 3 and 5 is rendered moot.

These rejections with respect to the remaining claims are traversed for the following reasons. Applicants submit that the features of the present invention as now more clearly recited in claims 1, 2, 4, 8-10 and 13 are not taught or suggested by Walsh, Pignolet or Hogeboom whether taken individually or in combination with each other as suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw these rejections.

It should be noted that amendments to claim 1, from which all of the other claims depend, to recite the features contained in originally presented claims 3 and 5. Originally presented claim 3 depends from claim 1 and originally presented claim 5 depends from claim 3.

It should be noted in the Office Action that the Examiner did not reject claim 5 based on the prior art of record. Thus, amending claim 1 from which all of the other claims depend so as to include the subject matter of originally presented claims 3 and 5 now causes claim 1 to recite features that the Examiner apparently considers not taught or suggested by the references of record.

Therefore, claim 1, and the claims which depend from claim 1, namely claims 2, 4 and 6-13, now are directed to features are not taught or suggested by any of the references of record whether taken individually or in combination with each other. Therefore, an indication of allowance of claims 1, 2, 4 and 6-13 is respectfully requested.

As a confirmation that the features recited in amended claim 1, and the claims that depend from claim 1, are not taught or suggested by any of the references of record particularly Walsh, Pignolet and Hogeboom whether taken individually or in combination with each other, the following is provided.

The unique structure of the Code Data Recovery circuit of the present invention, represented by structural element SIGNAL FREQUENCY MONITOR CIRCUIT 1257 and CDR TRANSFER SETTING CIRCUIT 1258 as illustrated in Figs.7, 8 of the present application and its related descriptions are clearly are not taught or suggested by any of the references of record whether taken individually or in combination with taken individually or in combination with each other.

According to the present invention, in the signal/frequency monitor circuit 1257, the capacitor 1279 is electrically charged by the constant current source 1265 at a constant rate and discharged each time the signal level of the Fiber signal (1) is switched. Accordingly, for example, if a frequency of the Fiber signal (1) increases, the quantity of a charge released in unit time increases. Therefore, a lapse of time from a moment when the capacitor 1279 starts to be charge to a moment when the voltage of the Charge Pump output (9) becomes the threshold voltage or higher becomes longer. If, for example, the frequency of the Fiber signal (1) decreases, on the other hand, the quantity of charge released in the unit time decreases. Therefore, the lapse of time from the moment when the capacitor 1279 starts to be charged to the moment when the voltage of the Charge Pump Output (9) reaches the threshold voltage or higher becomes shorter. It is thus possible according to the present invention to identify the frequency of the Fiber signal (1) based on

the lapse of time from the moment when the capacitor 1279 starts to be charged to the moment when the voltage of the Charge Pump output (9) becomes the threshold voltage or higher. Attention is directed to page 21, lines 4 to 26 of the present application.

Further, according to the present invention, in the CDR transfer setting circuit 1258, if the EVENT-P signal (10) is output from the comparator 1268 when the number of pulses of the GET Clock-N signal (11) is, for example, four to eight, a 1 Gb/s DET signal (15A) is output. If the EVENTCT-P signal (10) is output from the comparator 1268 when the number of pulses of the GET Clock-N signal (11) is 10(A) through 1 (E), a 2 Gb/s DET signal (15-B) is output. That is, when the a Gb/s DET signal (15-A) is output, the frequency of the Fiber signal (1) can be identified to be 1 Gbps, while when the 2 Gb/s DET signal (15-B) is output, the frequency of the Fiber signal (1) can be identified to be 2 Gbps. Attention is directed to the passage beginning on page 23, line 24 to page 24, line 8 of the present application.

Thus, as is clear from the above, the present invention as recited in the claims provides numerous features which are not taught or suggested by any of the references of record whether taken individually or in combination with each other. Particularly, the above described features of the present invention are not taught or suggested by Walsh, Pignolet or Hogeboom whether taken individually or in combination with each other as suggested by the Examiner in the Office Action.

Walsh discloses that central control apparatus defines a common data storage element format by the statement that the "Control apparatus automatically compensates for any nonuniformity among the data storage

elements by selecting a set of physical characteristics that define a common data storage element format" in ABSTRACT thereof. Therefore, Walsh is entirely different from the unique structure of the present invention as recited in the claims.

Further, all the remaining references, namely Pignolet and Hogeboom only discloses PLL for handing FEC, but not teach or suggest unique structure of the present invention as disclosed in FIGs.7, 8 and its related description of the specification and as recited in the claims.

Thus, Walsh, Pignolet or Hogeboom whether taken individually or in combination with each other fails to teach or suggest the features of the present invention as now more clearly recited in the claims. Particularly, as noted above, the Examiner apparently admits that the features of the present invention as recited in claim 5 which depends from claim 3, which depends from claim 1, are not taught or suggested by Walsh, Pignolet and Hogeboom whether taken individually or in combination with each other as suggested by the Examiner.

Further, as noted above, amendments were made to claim 1 from which all of the remaining claims depend so as to recite the features recited in claim 5 that the Examiner agrees are not taught or suggested by Walsh, Pignolet and Hogeboom whether taken individually or in combination with each other.

Therefore, reconsideration and withdrawal of the 35 USC §102(b) rejection of claim 1 as being anticipated by Walsh and reconsideration and withdrawal of the 35 USC §103(a) rejection of claims 2-4, 8-10 and 13 as being unpatentable over Walsh, Pignolet or Hogeboom whether taken

individually or in combination with each other and alternative forms is respectfully requested.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references utilized in the rejection of claims 1-4, 8-10 and 13.

In view of the foregoing amendments and remarks, applicants submit that claims 1, 2, 4 and 6-13 are in condition for allowance. Accordingly, early allowance of claims 1, 2, 4 and 6-13 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (500.43057X00).

Respectfully submitted,

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.



Carl I. Brundidge
Registration No. 29,621

CIB/jdc
(703) 684-1120